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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/573,121	REED ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jasmine Myers	4142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/14/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. In response to preliminary amendment received 23-March-2006, Claims 3-7, 9-10, 12-22, 24-27 and 29-33 are amended. Claims 1-33 are pending.

### ***Drawings***

2. The drawings are objected to because the unlabeled boxes shown in the drawings should be provided with descriptive text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities:
- page 8, line 32, change “fifth” to “sixth” to read “a sixth aspect of the present invention”;
  - page 9, line 2, change “second” to “third” to read “in the third aspect of the invention; and
  - page 20, lines 20 and 33, change “110” to “108”.

Appropriate correction is required.

***Claim Objections***

4. Claims 1, 4, 16 and 17 are objected to because of the following informalities:
- Claim 1, line 11, change first occurrence of “module” to “modules”, to read “application specific modules”;
  - Claim 4, line 3, change “correspond” to “corresponds”;
  - Claim 16, line 4, insufficient antecedent basis for “said plurality of modules”; change to “said one or more application specific modules”; and
  - Claim 17, line 3, insufficient antecedent basis for “said resolved modules”; change to “the resolved modules”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-21 and 31-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to Claims 1-21, on page 10, lines 19-22 of the specification, applicant has provided evidence that applicant intends the computing means to include transmission type media, such as “an electrical or optical signal which may be conveyed via electrical or optical cable or by radio or other means”, as such the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore the claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not combination of substances and therefor not a composition of matter.

With respect to Claims 31-33, the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material per se.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5-13, 16, 18-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6546002 B1) in view of Araujo et al. (US 20030191799 A1).

With respect to Claim 1, Kim teaches a software agent for representing a person in the virtual environment (“network based mobile interface agent . . . accessible using a computer”, col. 4, lines 43-45; “can be implemented by way of software”, col. 6, line 36; “Information specific to a particular user is stored in the form of the profile data”, col. 7, lines 50-51, where storing information specific to a user is interpreted as representing said user; and “Attributes include specific characteristics . . . that can be used to represent the user through the user interface”, col. 8, lines 54-55, where representing the user through the user interface is interpreted as representing said user in a virtual environment). Kim teaches one or more application specific modules each of which represents application specific features of the agent (“MIA includes . . . a pointer resolver, a scheduler, . . . an application server interface (AppServ interface)”, col. 9, line 64 – col. 10, line 1, where MIA is mobile interface agent, col. 5, lines 56-57, and a pointer resolver, a scheduler and an application server interface are interpreted as application specific modules each of which represents application specific features of the agent). Kim teaches a core module (“MIA includes a controller”, col. 9, line 64, where a controller is interpreted as a core module). Kim teaches common or generic features of the agent, said features at least in part facilitating inter-agent

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communication, such that inter-agent communication supports communication between a combination of the one or more application specific modules and the core module (“an input interface . . . an output interface”, col. 6, lines 38-40, and “a network interface”, col. 9, line 66, where input, output and network interfaces are interpreted as common generic features of an agent; “network interface is used to connect the controller to the network”, col. 10, lines 43-44, and “computer device having the MIA is connected to the network, the user can access applications/services from the AppServ and profile data from the master database”, col. 7, lines 23-26, where accessing applications/services and profile data implies inter-agent communication between a combination of the one or more application specific modules and the core module, and said inter-agent communication is facilitated by the network interface). Kim does not disclose a core module which contains one or more functional groups which define common or generic features of the agent. However, Araujo teaches a core module which contains one or more functional groups which define common or generic features of the agent (“virtual office software”, paragraph 75, interpreted as a core module, where said virtual office software “contains four office application modules”, paragraph 95, interpreted as one or more functional groups; office application modules include “File-sharing application module . . . to provide user file information . . . and permit the user to copy, move and delete files”, paragraph 97, “Thin-client application module . . . interacts . . . with a client application program”, paragraph 99, and “Administration module . . . to permit controlled, secure, remote access to the virtual office functionality”, paragraph 100, said modules/features interpreted as common or generic features of the agent) in order to

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provide remote user access to network-supported and hosted functions, with the same ease of use as a directly connected computer (paragraph 57). Therefore, based on Kim in view of Araujo, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Araujo to the system of Kim in order to provide remote user access to network-supported and hosted functions, with the same ease of use as a directly connected computer.

With respect to Claim 2, Kim teaches the functionality of the functional group comprises one or more of the following, belief management, user profile management, agent-user communication, module management, basic generic reasoning tools and/or between agent module to module communication (“MIA includes . . . a profile filter”, col. 9, line 64 – col. 10, line 1, where a profile filter is interpreted as a functional group within the core module, and the MIA will “access a user's MIA profile data via the profile data filter”, col. 10, lines 48-49, in order to “periodically update . . . the profile data”, col. 7, lines 53-55, where updating profile data is interpreted as user profile management).

With respect to Claim 3, Kim discloses the claimed subject matter as discussed above except the core module is provided with method means which provide the one or more functional groups. However, Araujo teaches the core module is provided with method means which provide the one or more functional groups (“virtual office software”, paragraph 75, interpreted as a core module, where said virtual office software “contains four office application modules”, paragraph 95, interpreted as one or more functional groups; office application modules include “File-sharing application module . . . to provide user file information . . . and permit the user to copy, move and delete files”,



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paragraph 97, “Thin-client application module . . . interacts . . . with a client application program”, paragraph 99, and “Administration module . . . to permit controlled, secure, remote access to the virtual office functionality”, paragraph 100, said modules/features interpreted as common or generic features of the agent). Therefore, the limitations of Claim 3 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 5, Kim teaches communication means are provided to facilitate communication between application specific modules in different agents (“Network can also be used to transfer information, files, data, applications, etc. between the MIA and other remote MIAs”, col. 8, lines 2-4, where an MIA and a remote MIA are different agents, and the information is transferred between application specific modules of said different agents).

With respect to Claim 6, Kim teaches the core module acts as an interface between external devices and at least one application specific module (“controller receives input commands via the input interface”, col. 10, lines 3-4, where “user can input commands via an action command . . . action command is generally performed using a conventional keyboard, mouse, or pad”, col. 6, lines 42-47, and a keyboard, mouse and pad are external devices; and “controller then processes the input commands”, col. 10, lines 5-6, where if a “user activates a pointer using one of the input commands, this command signal will be transmitted to the pointer resolver via . . . the controller”, col. 10, lines 10-13, interpreted as the controller receiving input from an

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external device, and acting as an interface to transmit said input to the pointer resolver (application specific module)).

With respect to Claim 7, Kim discloses the claimed subject matter as discussed above except a specification of message conversation protocols and a specification of primitive message semantics are implemented in separate modules. However, Araujo teaches a specification of message conversation protocols and a specification of primitive message semantics are implemented in separate modules (“Protocol engine . . . extracts the interaction data from the AIP message . . . RDP component . . . converts it into a corresponding RDP message”, paragraph 135, where a protocol engine is interpreted to contain a specification of message conversation protocols, an RDP component is interpreted to contain a specification of primitive message semantics, and said protocol engine and RDP component are interpreted as being implemented in separate modules). Therefore, the limitations of Claim 7 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 8, Kim discloses the claimed subject matter as discussed above except the core module provides primitive semantics for defining communication. However, Araujo teaches the core module provides primitive semantics for defining communication (“each of the modules . . . generates a message”, paragraph 96, where the modules are the functional groups of the core modules, and generating a message implies utilizing primitive semantics provided by the modules for defining communication). Therefore, the limitations of Claim 8 are rejected in the analysis of Claim 7 above, and the claim is rejected on that basis.

With respect to Claim 9, Kim discloses the claimed subject matter as discussed above except the one or more application specific modules specify message conversation protocols. However, Araujo teaches the one or more application specific modules specify message conversation protocols ("Sendmail module . . . implements message transmission through use of SMTP (simplified mail transport protocol)", paragraph 81, where a sendmail module is interpreted as an application specific module, and implementing message transmission through use of SMTP is interpreted as specifying message conversation protocols). Therefore, the limitations of Claim 9 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 10, Kim teaches the software agent is further provided with an inter-module communications means ("example of the scheduled event command includes launching certain applications at a specified time", col. 6, lines 57-59, where a scheduled event command is processed by the scheduler, and launching an application as a result of a scheduled event command implies inter-module communication between the scheduler and the AppServ server modules).

With respect to Claim 11, Kim discloses the claimed subject matter as discussed above except said inter-module communications means connects together all application specific modules and the core module in the agent. However, Araujo teaches said inter-module communications means connects together all application specific modules and the core module in the agent ("SEP acts . . . as a bridge between the user and his(her) office applications", paragraph 66, where SEP is service enablement platform, consisting of "operating system (O/S) and related modules and

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virtual office software”, paragraph 75, where an operating system and related modules are interpreted as application specific modules and virtual office software is interpreted as a core module, and SEP acting as a bridge between a user and his office applications implies inter-module communication means connecting together all application specific modules and the core module; and “incoming packets . . . flows . . . within the SEP through device drivers module, and via the O/S kernel, to TCP/IP processing module . . . to web server . . . to virtual office software”, paragraph 88, where said flow of incoming packets implies inter-module communications means connecting together all application specific modules (including device drivers module, O/S kernel, TCP/IP processing module and web server) and the core module (virtual office software) of the agent). Therefore, the limitations of Claim 11 are rejected in the analysis of Claim 1 and 10 above, and the claim is rejected on that basis.

With respect to Claim 12, Kim discloses the claimed subject matter as discussed above except the inter-module communication means is provided with one or more function calls. However, Araujo teaches the inter-module communication means is provided with one or more function calls (“TCP/IP packet processing . . . SSL processing”, paragraph 88, where TCP/IP packet processing and SSL processing are interpreted as functions within application specific modules, and are interpreted as being run via function calls through the enter-module communication means). Therefore, the limitations of Claim 12 are rejected in the analysis of Claim 1 and 10 above, and the claim is rejected on that basis.

With respect to Claim 13, Kim discloses the claimed subject matter as discussed above except the inter-module communication means provides for communication between functions in different modules of an agent. However, Araujo teaches the inter-module communication means provides for communication between functions in different modules of an agent (“incoming packets . . . flows . . . within the SEP through device drivers module . . . to TCP/IP processing module for appropriate TCP/IP packet processing, including packet disassembly . . . to web server, which calls on services of Open SSL to perform SSL processing on the packet if necessary”, paragraph 88, where TCP/IP packet processing and SSL processing are interpreted as functions in different modules, and flow of incoming packets through the functions is interpreted as communication between said functions). Therefore, the limitations of Claim 13 are rejected in the analysis of Claim 1 and 10 above, and the claim is rejected on that basis.

With respect to Claim 16, Kim discloses the claimed subject matter as discussed above except the agent further comprises an address resolving means for resolving an address in a message to one of said plurality of modules. However, Araujo teaches the agent further comprises an address resolving means for resolving an address in a message to one of said plurality of modules (“IP address translation on each such message and route that message to a correct office application server”, paragraph 72, where IP address translation on a message is interpreted as resolving an address in a message, and routing a message to a correct office application server implies transmitting said message through one of a plurality of application specific modules).

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Therefore, the limitations of Claim 16 are rejected in the analysis of Claim 1 above, and the claim is rejected on that basis.

With respect to Claim 18, Kim teaches the computing means is one or more computers (“MIA that is running as software on a computer”, col. 6, lines 2-3).

With respect to Claim 19, Kim teaches the computing means is one or more personal digital assistants (“MIA that is running as software on a . . . PDA device”, col. 6, lines 2-3).

With respect to Claim 20, Kim teaches the computing means is one or more mobile communications devices (“mobile interface agent to be accessible by a user using any digital communication device such as a cellular phone”, col. 4, lines 30-32).

With respect to Claim 21, Kim teaches the computing means is distributed across a plurality of computing devices (“single server does not maintain all of the user profile data, but is rather distributed throughout multiple and redundant servers”, col. 11, lines 39-41).

With respect to Claim 22, Kim discloses the claimed subject matter as discussed above except receiving a request specifying a function; mapping said request to a module method corresponding to the specified function; and invoking said module method. However, Araujo teaches receiving a request specifying a function (“browser communicates user form input and URI (uniform resource identifier)/URL (uniform resource locator) selection via HTTP requests to SEP”, paragraph 64, where SEP, service enablement platform, receives request, and user form input and URI/URL selection are interpreted as specifying a function) in order to provide remote user

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access to network-supported and hosted functions, with the same ease of use as a directly connected computer (paragraph 57). Araujo teaches mapping said request to a module method corresponding to the specified function ("HTTP request is extracted and sent to virtual office software for protocol translation into a form suitable for use by a desired office application", paragraph 88, where translating a protocol into a form suitable for use by a desired office application implies mapping user requests to office applications, and an office application is interpreted as a specified function). Araujo teaches invoking said module method ("user can . . . remotely execute . . . any of his(her) thin-client applications", paragraph 65, where remotely executing an application is interpreted as invoking a module method). Therefore, based on Kim in view of Araujo, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Araujo to the system of Kim in order to provide remote user access to network-supported and hosted functions, with the same ease of use as a directly connected computer.

With respect to Claim 27, Kim teaches resolving said address to one of a plurality of modules in a second, receiving agent ("Network can also be used to transfer information . . . between the MIA and other remote MIAs", col. 8, lines 2-4, where an MIA and a remote MIA are first and second agents, and the information is transferred from the first MIA to one of a plurality of modules in the second, remote MIA based on a resolved address). Kim does not disclose receiving a message comprising an address from a first agent; resolving said address; and transferring the message to the resolved module. However, Araujo teaches receiving a message comprising an address from a

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first agent; resolving said address; and transferring the message to the resolved module (“SEP can intercept incoming network messages . . . perform . . . IP address translation . . . and route that message to a correct . . . server”, paragraph 72, where intercepting incoming networking messages is interpreted as receiving a message from a first agent, performing address translation implies that said message includes an address and is interpreted as resolving said address, and routing a message to a correct server is interpreted as transferring said message to the resolved module) in order to provide remote user access to network-supported and hosted functions, with the same ease of use as a directly connected computer (paragraph 57). Therefore, based on Kim in view of Araujo, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Araujo to the system of Kim in order to provide remote user access to network-supported and hosted functions, with the same ease of use as a directly connected computer.

With respect to Claim 28, Kim teaches said address specifies the module (“address of a server for a particular service”, col. 11, lines 16-17, where a service is accessed through a module, and specifying an address for a service is interpreted as specifying an address for its corresponding module).

With respect to Claim 29, Kim teaches communicating with an external device by: identifying the device that a user is employing; mapping said device to a set of media types; and initiating the delivery of media to said device responsive to the mapped set (“MIA will check to determine what computer device it is on and based on the device's profile and list of registered applications, it will enable local applications and



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services that are available”, col. 12, lines 35-38, where a device profile and list of registered applications are interpreted as a mapping of a set of media types for a given device; “MIA will use appropriate types of output for the particular device that it is running on”, col. 7, lines 8-9, where using appropriate types of output for a particular device is interpreted as initiating delivery of media to said device based on the device’s profile and list of registered applications).

With respect to Claim 30, Kim teaches limiting the set of media types based on user preferences (“profile data includes . . . applications/services”, col. 8, lines 23-27, where applications and services are interpreted as specific to a given device; and “MIA can also check for other information regarding the user’s preference from the profile data”, col. 9, lines 51-52, where other information is interpreted to include user preferences for a limited set of media types available for a given device).

With respect to Claim 31, Kim teaches a computer program comprising program instructions for causing a computer to operate a software agent (“MIA that is running as software on a computer”, col. 6, lines 2-3; and “MIA . . . can be implemented by way of software”, col. 6, lines 34-36).

With respect to Claim 32, Kim teaches a computer program comprising program instructions (“MIA that is running as software on a computer”, col. 6, lines 2-3; and “MIA . . . can be implemented by way of software”, col. 6, lines 34-36).

With respect to Claim 33, Kim teaches a computer program comprising program instructions (“MIA that is running as software on a computer”, col. 6, lines 2-3; and “MIA . . . can be implemented by way of software”, col. 6, lines 34-36).

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9. Claims 4, 14-15, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Araujo, and further in view of Berger et al. (US 20030014466 A1).

With respect to Claim 4, Kim and Araujo disclose the claimed subject matter as discussed above except the functionality of the functional group corresponds to a set of labels. However, Berger teaches the functionality of the functional group corresponds to a set of labels (“processes are provided with a label or tag”, paragraph 35, where a process is interpreted as a functional group, and the label provided to the process is interpreted as corresponding to the functionality of said process) in order to implement custom system calls (paragraph 52). Therefore, based on Kim in view of Araujo and further in view of Berger, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Berger to the system of Kim in view of Araujo in order to implement custom system calls.

With respect to Claim 14, Kim and Araujo disclose the claimed subject matter as discussed above except the inter-module communication means provides for mapping a request from a first module to a method means in a second module. However, Berger teaches the inter-module communication means provides for mapping a request from a first module to a method means in a second module (“memory comprising compartment name to number mapping . . . to identify the corresponding rules in rule database that are applicable to a particular compartment”, paragraph 48, where a compartment is interpreted as a module, and “Rule database contains information about allowable communication paths between compartments”, paragraph 47, where rules that are

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applicable to a particular compartment provide for mapping a request from said compartment to a second compartment, according to information about allowable communication paths contained in the rule database) in order to implement custom system calls (paragraph 52). Therefore, based on Kim in view of Araujo and further in view of Berger, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Berger to the system of Kim in view of Araujo in order to implement custom system calls.

With respect to Claim 15, Kim and Araujo disclose the claimed subject matter as discussed above except said request from said first module comprises a label specifying a function and said method means in a second module corresponds to the specified function. However, Berger teaches said request from said first module comprises a label specifying a function and said method means in a second module corresponds to the specified function (“processes are provided with a label or tag”, paragraph 35, where a process is interpreted as a function in a module; “system calls may include . . . to run processes in particular compartments”, paragraph 47, where a system call is interpreted as a request from a first module for a function in a second module, and said system call includes a label specifying said function). Therefore, the limitations of Claim 15 are rejected in the analysis of Claim 14 above, and the claim is rejected on that basis.

With respect to Claim 23, Kim and Araujo disclose the claimed subject matter as discussed above except said request comprises a label specifying said function. However, Berger teaches said request comprises a label specifying said function

(“processes are provided with a label or tag”, paragraph 35, where a process is interpreted as a function; and “system calls may include . . . to run processes in particular compartments”, paragraph 47, where a system call is interpreted as a request, comprising a label specifying the requested function) in order to implement custom system calls (paragraph 52). Therefore, based on Kim in view of Araujo and further in view of Berger, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Berger to the system of Kim in view of Araujo in order to implement custom system calls.

With respect to Claim 24, Kim and Araujo disclose the claimed subject matter as discussed above except receiving a request comprising a label; looking up the label in a table; and calling a method corresponding to the label. However, Berger teaches receiving a request comprising a label (“system calls . . . to run processes in particular compartments”, paragraph 47, where a system call is interpreted as a request; and “processes are provided with a label or tag”, paragraph 35, where the process is called using the label). Berger teaches looking up the label in a table (“Rule database contains information about allowable communication paths between compartments”, paragraph 47, where a rule database is interpreted as a table containing labels; and “identify the corresponding rules in rule database that are applicable”, paragraph 48, where identifying applicable rules implies looking up a label in the rule database). Berger teaches calling a method corresponding to the label (“processes of the compartments are limited to accessing system resources according to the rules stored in rule database”, paragraph 47, where a process accessing system resources implies

calling a method corresponding to the label identifying said process). Therefore, the limitations of Claim 24 are rejected in the analysis of Claim 23 above, and the claim is rejected on that basis.

With respect to Claim 26, Kim discloses the claimed subject matter as discussed above except returning a value to an originator of the request. However, Araujo teaches returning a value to an originator of the request (“construct a suitable response containing that data (if any) and provide it . . . to user interaction component . . . Component then returns . . . to user browser”, paragraph 105, where user browser is interpreted as an originator of the request, and a suitable response is interpreted as a value).

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Araujo, and further in view of Shobatake (US 5506847 A).

With respect to Claim 17, Kim and Araujo disclose the claimed subject matter as discussed above except said agent further comprises a transfer means for transferring messages from said resolved modules such that the messages are interleaved to allow an agent to be simultaneously involved in multiple conversations with other agents. However, Shobatake teaches said agent further comprises a transfer means for transferring messages from said resolved modules such that the messages are interleaved to allow an agent to be simultaneously involved in multiple conversations with other agents (“message interleaving can be performed”, col. 73, line 5) in order to minimize the transfer delay of an average message (col. 73, lines 5-6). Therefore, based on Kim in view of Araujo and further in view of Shobatake, it would have been

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obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Shobatake to the system of Kim in view of Araujo in order to minimize the transfer delay of an average message.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Araujo and Berger, and further in view of Wolton et al. (US 20040030741 A1).

With respect to Claim 25, Kim, Araujo and Berger disclose the claimed subject matter as discussed above except selecting a highest priority method corresponding to the label. However, Wolton teaches selecting a highest priority method corresponding to the label (“agents have local or remote registries of . . . other individual agents . . . they can and will engage with . . . registry is a collection of agent configuration attributes and contents, which are given a label”, paragraph 1018; “registry of private agent and inter -agent activities are called agent plans . . . plan registry can have ranking and priority . . . agent can select the higher ranking behavioral option in the registry that fits the request”, paragraph 1019, where the selected higher ranking behavioral option is interpreted as corresponding to a label identified in a request) in order to provide an integrated solution which can be effectively used by the majority of non-programmer consumers (paragraph 47). Therefore, based on Kim in view of Araujo and Berger and further in view of Wolton, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Wolton to the system of Kim in view of Araujo and Berger in order to provide an integrated solution which can be effectively used by the majority of non-programmer consumers.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Myers whose telephone number is (571)270-7201. The examiner can normally be reached on Monday - Thursday 7:30am - 5pm, Alternate Fridays 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joon Hwang can be reached on (571) 272-4036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/J. M./  
Examiner, Art Unit 4142  
31-December-2008

/Joon H. Hwang/  
Supervisory Patent Examiner, Art Unit 4142